

Claims

Method for the controlled delivery of digital services within a plurality of providers (SP) and users (U), wherein said services are identified by respective stream of encoded data emitted by said providers (SP) and the users are provided with reception means (STB) to receive said data streams, the reception means being selectively enabled to make use of determined services through a respective user unit (105), characterised in that it comprises the operations of:

- incorporating into said coded data streams at least one algorithm for enabling the use of respective determined services (TMW2),
- incorporating into said coded data streams a respective identifying code (EMM) for each user (U) to be enabled to receive a certain service,
- associating to said user unit (105) a processing function (VM) capable recognising and executing said at least one enabling algorithm by exploiting said identifying code, to enable the receiving means (STB) of the respective user to make use of said service.
- 2. Method according to claim 1, characterised in that it comprises the operation of configuring said user unit (105) as a movable processing support uniquely assigned to one of said users (1) and arranged to be selectively associated to said reception means (STB), said reception means (STB) being of a generalised type common to multiple users of said plurality (U).
- 3. Method according to claim 2, characterised in that it comprises the operation of configuring said movable processing support as a smart card.
- 4. Method according to any of the previous claims, characterised in that it comprises the following operations:
 - associating to said reception means (STB) a trusted middleware (TMW) function,
 - configuring said trusted middleware function into a static part (TMW1), residing on said reception means (STB), and a dynamic part (TMW2) arranged to be selectively transferred onto said user unit (105) in view of the execution of said at least one algorithm by said processing function (VM).
- 5. Method according to any of the previous claims, characterised in that it comprises the following operations:
 - configuring said data streams as MPEG data streams containing EMM messages,
 - inserting said identifying code in to the EMM messages,
 - activating, through said user unit (105) and upon reception of said at least one algorithm, the performance of the following functions:

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extracting, reading and deciphering the EMM messages contained in the data stream received.

- \interpreting said identification code contained in the EMM messages,
- executing said at least one enabling algorithm by exploiting said identification code.
- 6. Method according to any of the previous claims, characterised in that said at least one enabling algorithm is incorporated in to a stream of private data within said data stream.
- 7. Method according to any of the previous claims, characterised in that, upon reception of said at least one algorithm, said processing function (VM) enables said reception means to operation as transmitters to transmit information about the delivery of the service itself.
- 8. System for the controlled delivery of digital services by a plurality of providers (SP) to a plurality of users (U), wherein said services are identified by respective coded data streams delivered by said providers (SP) and the users are provided with receiving means (STB) to receive said data streams, the receiving means being selectively enabled to make use of determined services through a respective user unit (105), characterised in that:
 - said providers (SP) are arranged to incorporate into the respective encoded data streams at least one algorithm for enabling use of respective determined services, as well as to incorporate into said encoded data streams a respective identification code (TMW2) for each user (U) to be enabled to receive a determined service,
 - said user units (105) have associated thereto a processing function (VM) arranged to recognise and execute said at least one algorithm on the basis of said identifying code, to enable the receiving means (STB) of the respective user to make use of said service.
- 9. System according to claim 8, characterised in that said user units (105) are configured as removable processing supports uniquely assigned each to one of said users (1) and arranged to be selectively associated to said receiving means, said receiving means being of a generalised type common to multiple users of said plurality (U).
- 10. System according to claim 9, characterised in that said movable processing supports are configured as smart cards.
- 35 11. System according to any of claims 8 to 10, characterised in that:
 - said receiving means have associated thereto a trusted middle ware function (TMW) configured in a static part (TMW1), residing on said receiving means

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(STB), and in a dynamic part (TMW2) arranged to be selectively transferred on the respective user unit (105) in view of the execution of said at least one algorithm by said processing function (VM).

- 12. System according to any of claims 8 through 11, characterised in that said service providers emit said data streams as MPEG data streams containing EMM messages with said identifying code inserted in said EMM messages, and said receiving means comprise:
 - means for extracting, reading and deciphering the EMM messages contained in the received data stream,
 - means (103, 104) for interpreting said identifying code contained in the EMM messages, and
 - processing means (VM) to execute said at least one enabling algorithm on the basis of said identifying code.
- 13. System according to any of claims 8 through 12, characterised in that said service providers incorporate said at least one enabling algorithm into a stream of private data within said data streams.
- 14. System according to claim 13, characterised in that the receiving means can be activated by said user unit (105) upon reception of said at least one algorithm for operation as transmitters to transmit information about the delivery of the service itself.
- 15. System according to any of claims 8 through 14, characterised in that said user unit (105) is configured as a Java Card.

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